

Applicants : Tove Ringerike et al.
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Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-3. (Canceled)

4. (Currently Amended) ~~The nucleic acid molecule according to claim 1, characterised in that it is an~~ An isolated nucleic acid molecule coding an expression box with the formula:

S₁-S₂-S₃ wherein:

S₁ is a promoter sequence which is present or absent,

S₂ is a known reporter gene sequence,

S₃ is a regulatory 3'UTR sequence which is present or absent,

where the promoter sequence and the regulatory 3'UTR sequence are found in a known cytokine gene, and are the controlling sequences of said cytokine, and wherein the expression box is contained in

of: p1-5'IL1 β /d1EGFP-N1 (SEQ ID NO:1), p2-5'IL1 β /d1EGFP-N1 (SEQ ID NO:2), p3-5' IL1 β /d1EGFP-N1 (SEQ ID NO:3), p4-5'IL1 β /d1EGFP-N1 (SEQ ID NO:4), p1-5'3' IL1 β /d1EGFP-N1 (SEQ ID NO:5), p2-5'3'IL1 β /d1EGFP-N1 (SEQ ID NO:6), p3-5'3'IL1 β /d1EGFP-N1 (SEQ ID NO:7), p4-5'3'IL1 β /d1EGFP-N1 (SEQ ID NO:8), p1-5'IL2/EGFP-1 (SEQ ID NO:9), p1-5'IL2/d2EGFP-1 (SEQ ID NO:10), p1-5'3'IL2/d2EGFP-1 (SEQ ID NO:11), p1-3'TNF α /d1EGFP-N1 (SEQ ID NO:12), p2-3'TNF α /EGFP-F (SEQ ID NO:13), p3-3'TNF α /EGFP-F (SEQ ID NO:14), p1-5'TNF α /d1EGFP-N1 (SEQ ID NO:15), p1-5'3'TNF α /d1EGFP-N1 (SEQ ID NO:16), p1-3'IL4/d1EGFP-N1 (SEQ ID NO:17), p2-3'IL4/EGFP-F (SEQ ID NO:18), p3-3'IL4/EGFP-F (SEQ ID NO:19), p4-3'IL4/CA-EGFP (SEQ ID NO:20), p5-3'IL4/d1EGFP-N1 (SEQ ID NO:21), p1-5'IL4/EGFP-1 (SEQ ID NO:22), p1-5'IL4/d1EGFP-N1 (SEQ ID NO:23), p2-5'IL4/EGFP-1 (SEQ ID NO:24), p2-5'IL4/d1EGFP-N1 (SEQ ID NO:25), p1-5'3'IL4/EGFP-1 (SEQ ID NO:26), p1-5'3'IL4/d1EGFP-N1 (SEQ ID

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NO:27), p2-5'3'IL4/d1EGFP-N1 (SEQ ID NO:28), p1-5'INF γ /EGFP-1 (SEQ ID NO:29), p1-5'INF γ /d2EGFP-1 (SEQ ID NO:30), p1-5'3'INF γ /d2EGFP-1 (SEQ ID NO:31), p1-5'IL10/EGFP-1 (SEQ ID NO:32), p1-5'3'IL10/EGFP-1 (SEQ ID NO:33), p2-5'IL10/d2EGFP-1 (SEQ ID NO:34), and p2-5'3'IL10/d2EGFP-1 (SEQ ID NO:35).

5-7. (Canceled)

8. (Currently Amended) ~~The~~ An expression vector ~~according to~~
~~claim 5, characterised in that it is comprising~~ a plasmid
~~selected from among the following~~ the group consisting of: p1-
5'IL1 β /d1EGFP-N1 (SEQ ID NO:1), p2-5'IL1 β /d1EGFP-N1 (SEQ ID
NO:2), p3-5' IL1 β /d1EGFP-N1 (SEQ ID NO:3), p4-5'IL1 β /d1EGFP-N1
(SEQ ID NO:4), p1-5'3' IL1 β /d1EGFP-N1 (SEQ ID NO:5), p2-
5'3'IL1 β /d1EGFP-N1 (SEQ ID NO:6), p3-5'3'IL1 β /d1EGFP-N1 (SEQ ID
NO:7), p4-5'3'IL1 β /d1EGFP-N1 (SEQ ID NO:8), p1-5'IL2/EGFP-1 (SEQ
ID NO:9), p1-5'IL2/d2EGFP-1 (SEQ ID NO:10), p1-5'3'IL2/d2EGFP-1
(SEQ ID NO:11), p1-3'TNF α /d1EGFP-N1 (SEQ ID NO:12), p2-
3'TNF α /EGFP-F (SEQ ID NO:13), p3-3'TNF α /EGFP-F (SEQ ID NO:14),
p1-5'TNF α /d1EGFP-N1 (SEQ ID NO:15), p1-5'3'TNF α /d1EGFP-N1 (SEQ ID
NO:16), p1-3'IL4/d1EGFP-N1 (SEQ ID NO:17), p2-3'IL4/EGFP-F (SEQ
ID NO:18), p3-3'IL4/EGFP-F (SEQ ID NO:19), p4-3'IL4/CA-EGFP (SEQ
ID NO:20), p5-3'IL4/d1EGFP-N1 (SEQ ID NO:21), p1-5'IL4/EGFP-1
(SEQ ID NO:22), p1-5'IL4/d1EGFP-N1 (SEQ ID NO:23), p2-5'IL4/EGFP-
1 (SEQ ID NO:24), p2-5'IL4/d1EGFP-N1 (SEQ ID NO:25), p1-
5'3'IL4/EGFP-1 (SEQ ID NO:26), p1-5'3'IL4/d1EGFP-N1 (SEQ ID
NO:27), p2-5'3'IL4/d1EGFP-N1 (SEQ ID NO:28), p1-5'INF γ /EGFP-1
(SEQ ID NO:29), p1-5'INF γ /d2EGFP-1 (SEQ ID NO:30), p1-
5'3'INF γ /d2EGFP-1 (SEQ ID NO:31), p1-5'IL10/EGFP-1 (SEQ ID
NO:32), p1-5'3'IL10/EGFP-1 (SEQ ID NO:33), p2-5'IL10/d2EGFP-1
(SEQ ID NO:34), and p2-5'3'IL10/d2EGFP-1 (SEQ ID NO:35).

9. (Currently Amended) A single-celled host transformed or
transfected with a DNA molecule according to claim ~~4~~ 4.

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10. (Canceled)

11. (Previously Presented) The single-celled host according to claim 9, characterised in that it is selected from the group encompassing bacteria, yeast, mammalian cells, plant cells, insect cells, as well as eukaryotic cell lines.

12. (Currently Amended) The single-celled host according to claim 11, characterised in that it is an immortal mammalian cell line, ~~preferentially descendant from cells of the immune system.~~

13. (Currently Amended) The single-celled host according to claim 11, characterised in that it is a cell line selected from ~~among~~ the group consisting of T cell leukemia cells, thymoma, mast cells, macrophage-monocytes, fibroblasts and keratinocytes.

14. (Canceled)

15. (Currently Amended) The single-celled host according to claim 11, characterised in that it is a cell line selected from ~~among~~ the following the group consisting of: EL4, BW5147.3, C57.1, J774A.1, 3T3 L1, MC/9 and HEL-30.

16. (Currently Amended) The single-celled host according to claim 11, characterised in that it is a cell line selected from ~~among~~ the group consisting of: C/p1-5'3'TNF α -dEGFP/2 (deposited in ECACC, Accession No. 3091202), EL/p1-5'IL2-dEGFP/6 (deposited in ECACC, Accession No. 3091204), EL/p2-5'IL4-dEGFP/2 (deposited in ECACC, Accession No. 3091205), EL/p1-5'IFN γ -dEGFP/3 (deposited in ECACC, Accession No. 3091206), EL/p2-5'IL10-dEGFP/5 (deposited in ECACC, Accession No. 3091207), and J/p4-5'IL1 β -dEGFP/4 (deposited in ECACC, Accession No. 3091208).

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17-23. (Canceled)

24. (Withdrawn-Currently Amended) A method of obtaining characteristics of ~~the~~ a tested substance, characterised in that
a) the tested substance is put into contact with the ~~cell-line~~
single-celled host according to claim 9,
b) ~~it determines~~ a change in the level of expression of a reporter gene caused by the tested substance is determined,
c) a change in the level of expression described in (b) is accepted as a characteristic of the tested substance.

25-43. (Canceled)

44. (New) The isolated nucleic acid molecule of claim 4, wherein the expression box is contained in a plasmid selected from the group consisting of: p4-5'IL1 β /d1EGFP-N1 (SEQ ID NO:4), p1-5'IL2/d2EGFP-1 (SEQ ID NO:10), p1-5'3'TNF α /d1EGFP-N1 (SEQ ID NO:16), p2-5'IL4/d1EGFP-N1 (SEQ ID NO:25), p1-5'INF γ /d2EGFP-1 (SEQ ID NO:30), and p2-5'IL10/d2EGFP-1 (SEQ ID NO:34).

45. (New) The expression vector of claim 8, wherein the plasmid is selected from the group consisting of: p4-5'IL1 β /d1EGFP-N1 (SEQ ID NO:4), p1-5'IL2/d2EGFP-1 (SEQ ID NO:10), p1-5'3'TNF α /d1EGFP-N1 (SEQ ID NO:16), p2-5'IL4/d1EGFP-N1 (SEQ ID NO:25), p1-5'INF γ /d2EGFP-1 (SEQ ID NO:30), and p2-5'IL10/d2EGFP-1 (SEQ ID NO:34).

46. (New) A single-celled host transformed or transfected with a DNA molecule according to claim 8.

47. (New) The single-celled host according to claim 46, characterised in that it is selected from the group encompassing bacteria, yeast, mammalian cells, plant cells, insect cells, as well as eukaryotic cell lines.

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48. (New) The single-celled host according to claim 47, characterised in that it is an immortal mammalian cell line.

49. (New) The single-celled host according to claim 47, characterised in that it is a cell line selected from the group consisting of T cell leukemia cells, thymoma, mast cells, macrophage-monocytes, fibroblasts and keratinocytes.

50. (New) The single-celled host according to claim 47, characterised in that it is a cell line selected from the group consisting of: EL4, BW5147.3, C57.1, J774A.1, 3T3 L1, MC/9 and HEL-30.

51. (New) The single-celled host according to claim 47, characterised in that it is a cell line selected from the group consisting of: C/p1-5'3'TNF α -dEGFP/2 (deposited in ECACC, Accession No. 3091202), EL/p1-5'IL2-dEGFP/6 (deposited in ECACC, Accession No. 3091204), EL/p2-5'IL4-dEGFP/2 (deposited in ECACC, Accession No. 3091205), EL/p1-5'IFN γ -dEGFP/3 (deposited in ECACC, Accession No. 3091206), EL/p2-5'IL10-dEGFP/5 (deposited in ECACC, Accession No. 3091207), and J/p4-5'IL1 β -dEGFP/4 (deposited in ECACC, Accession No. 3091208).

52. (New) A method of obtaining characteristics of a tested substance, characterised in that

- a) the tested substance is put into contact with the single-celled host according to claim 46,
- b) a change in the level of expression of a reporter gene caused by the tested substance is determined,
- c) a change in the level of expression described in (b) is accepted as a characteristic of the tested substance.